504650551 11/20/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

t Version v1.1 EPAS ID: PAT4697272

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JU-YONG DO	10/25/2017
SAI PRADEEP VENKATRAMAN	10/23/2017
MEGHNA AGRAWAL	10/23/2017
WEIHUA GAO	11/14/2017
GENGSHENG ZHANG	10/23/2017

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED
Street Address: 5775 MOREHOUSE DRIVE	
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	15709065		

CORRESPONDENCE DATA

Fax Number: (408)720-8383

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4087208300

Email: katie_lister@bstz.com

Correspondent Name: BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

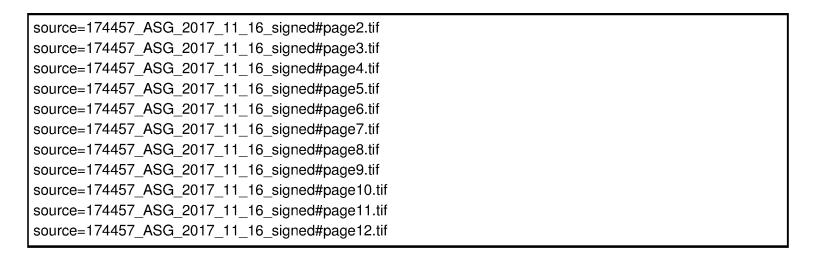
Address Line 1: 1279 OAKMEAD PARKWAY

Address Line 4: SUNNYVALE, CALIFORNIA 94085

ATTORNEY DOCKET NUMBER:	Y DOCKET NUMBER: 174457	
NAME OF SUBMITTER:	WILLIAM L. JAFFE, REG. NO. 64977	
SIGNATURE:	/William L. Jaffe/	
DATE SIGNED:	11/20/2017	

Total Attachments: 12

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WHEREAS, WE,

- 1. Ju-Yong DO, a citizen of the Republic of Korea, having a mailing address located at 19503 Stevens Creek Blvd. #108, Cupertino, California, 95104 USA and a resident of Cupertino, California,
- 2. Sai Pradeep VENKATRAMAN, a citizen of India, having a mailing address located at 2719 Taft Avenue, Santa Clara, CA 95051, USA and a resident of Santa Clara, California,
- 3. Meghna AGRAWAL, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of Cupertino, California,
- 4. Weihua GAO, a citizen of the People's Republic of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of San Jose, California,
- 5. Gengsheng ZHANG, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of Cupertino, California,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to METHOD AND SYSTEM FOR USER EQUIPMENT COMMUNICATION MODE SELECTION (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 15/709,065 filed September 19, 2017, Qualcomm Reference No. 174457, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at <u>C</u>	Santa Clar LOCATION	z, on 10	125/17		
				Ju-Yong DO	
Done at	LOCATION	, on	DATE	Sai Pradeep VENKATRAMAN	
Done at_	LOCATION	_, on	DATE	Meghna AGRAWAL	•
Done at	LOCATION	, on	DATE	Weihua GAO	×
Done at_		, on			
	LOCATION		DATE	Gengsheng ZHANG	

WHEREAS, WE,

- 1. Ju-Yong DO, a citizen of the Republic of Korea, having a mailing address located at 19503 Stevens Creek Blvd. #108, Cupertino, California, 95104 USA and a resident of Cupertino, California,
- 2. Sai Pradeep VENKATRAMAN, a citizen of India, having a mailing address located at 2719 Taft Avenue, Santa Clara, CA 95051, USA and a resident of Santa Clara, California,
- 3. Meghna AGRAWAL, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of Cupertino, California,
- 4. Weihua GAO, a citizen of the People's Republic of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of San Jose, California,
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WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

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AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance:

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

PATENT QUALCOMM Ref. No. 174457 Page 3 of 3

whatsoever conflicting with these presents. Done at Society Communication, on 10/23/2017 V Sai Pradeep VENKATRAMAN Meghna AGRAWAL Weihua GAO LOCATION DATE

AND WE HEREBY covenant that WE will not execute any writing or do any act

PATENT **REEL: 044178 FRAME: 0790**

Gengsheng ZHANG

WHEREAS, WE,

- 1. Ju-Yong DO, a citizen of the Republic of Korea, having a mailing address located at 19503 Stevens Creek Blvd. #108, Cupertino, California, 95104 USA and a resident of Cupertino, California,
- 2. Sai Pradeep VENKATRAMAN, a citizen of India, having a mailing address located at 2719 Taft Avenue, Santa Clara, CA 95051, USA and a resident of Santa Clara, California,
- 3. Meghna AGRAWAL, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of Cupertino, California,
- 4. Weihua GAO, a citizen of the People's Republic of China, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of San Jose, California,
- 5. Gengsheng ZHANG, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 USA and a resident of Cupertino, California,

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AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at_	, on	f	
_	LOCATION	DATE	Ju-Yong DO
Done at_	, on		
	LOCATION	DATE	Sai Pradeep VENKATRAMAN
			,
Done at_			
	LOCATION	DATE	Meghna AGRAWAL
Done at	Santa Clara, on	Nov. 14. 2017	
	LOCATION	DATE	Weihua GAO
Done at_	, on		
	LOCATION	DATE	Gengsheng ZHANG

WHEREAS, WE.

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AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation, validation applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

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> PATENT REEL: 044178 FRAME: 0796

RECORDED: 11/20/2017